

## § 63.15-1

Information for submitting the VSP electronically can be found at *http://www.uscg.mil/HQ/MSC*.

(a) Detailed instructions for operationally testing each automatic auxiliary boiler, its controls, and safety devices.

(b) A certification report for each automatic auxiliary boiler that:

(1) Meets paragraph CG-510 of ASME CSD-1 (incorporated by reference, see 46 CFR 63.05-1); and

(2) Certifies that each automatic auxiliary boiler, its controls, and safety devices comply with the additional requirements of this part.

[CGD 88-057, 55 FR 24238, June 15, 1990, as amended by USCG-2007-29018, 72 FR 53965, Sept. 21, 2007; USCG-2003-16630, 73 FR 65190, Oct. 31, 2008; USCG-2009-0702, 74 FR 49229, Sept. 25, 2009]

### Subpart 63.15—General Requirements

#### § 63.15-1 General.

(a) Each automatic auxiliary boiler must be designed and constructed for its intended service according to the requirements of the parts referenced in § 54.01-5, Table 54.01-5(A) of this chapter.

(b) Controls and safety devices for automatic auxiliary boilers must meet the applicable requirements of ASME CSD-1 (incorporated by reference, see 46 CFR 63.05-1), except Paragraph CG-310.

(c) All devices and components of an automatic auxiliary boiler must satisfactorily operate within the marine environment. The boiler must satisfactorily operate with a momentary roll of 30°, a list of 15°, and a permanent trim of 5° with it installed in a position as specified by the manufacturer.

(d) An electrical control used to shut down the automatic auxiliary boiler must be installed in accordance with § 58.01-25 of this chapter. This device must stop the fuel supply to the fuel burning equipment.

(e) Mercury tube actuated controls are prohibited from being installed and used on automatic auxiliary boilers.

[CGD 88-057, 55 FR 24238, June 15, 1990, as amended by USCG-2003-16630, 73 FR 65191, Oct. 31, 2008]

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#### § 63.15-3 Fuel system.

(a) Firing of an automatic auxiliary boiler by natural gas is prohibited unless specifically approved by the Marine Safety Center.

(b) Heated heavy fuel oil may be used provided the heaters are equipped with a high temperature limiting device that shuts off the heating source at a temperature below the flashpoint of the oil and is manually reset. When a thermostatically-controlled electric oil heater and a level device is used, it must meet the requirements of part 111, subpart 111.85 of this chapter.

NOTE: An auxiliary boiler may be safely ignited from the cold condition using unheated diesel or light fuel oil and subsequently shifted to heated heavy fuel.

(c) The fuel oil service pump and its piping system must be designed in accordance with § 56.50-65 of this chapter. All materials must meet the requirements of part 56, subpart 56.60 of this chapter. The use of cast iron or malleable iron is prohibited.

(d) The fuel oil service system (including the pump) must meet the pressure classification and design criteria found in § 56.04-2, Table 56.04-2 of this chapter.

(e) When properly selected for the intended service, fuel pumps meeting the performance and test requirements of UL 343 (incorporated by reference, see 46 CFR 63.05-1) meet the requirements of this section.

[CGD 88-057, 55 FR 24238, June 15, 1990, as amended by USCG-2003-16630, 73 FR 65191, Oct. 31, 2008]

#### § 63.15-5 Strainers.

(a) Strainers must be installed in the fuel supply line. Each strainer must be self-cleaning, fitted with a bypass, or be capable of being cleaned without interrupting the fuel oil supply.

(b) The strainer must not allow a quantity of air to be trapped inside which would affect the rate of fuel flow to the burner or reduce the effective area of the straining element.

(c) The strainer must meet the requirements for strainers found in UL 296 (incorporated by reference, see 46 CFR 63.05-1) and the requirements for

fluid conditioner fittings found in 46 CFR 56.15-5.

[CGD 88-057, 55 FR 24238, June 15, 1990, as amended by USCG-2003-16630, 73 FR 65191, Oct. 31, 2008]

#### § 63.15-7 Alarms.

(a) An audible alarm must automatically sound when a flame safety system shutdown occurs. A visible indicator must indicate that the shutdown was caused by the flame safety system.

(b) Means must be provided to silence the audible alarm. The visible indicators must require manual reset.

(c) For steam boilers, operation of the lower low water cutoff must automatically sound an audible alarm. A visual indicator must indicate that the shutdown was caused by low water.

(d) For a periodically unattended machinery space, the auxiliary boiler trip alarm required by 46 CFR 62.35-50, Table 62.35-50 satisfies the requirements for the audible alarms specified in this section.

#### § 63.15-9 Inspections and tests.

All automatic auxiliary boilers must be inspected and tested in accordance with the requirements of part 61 of this chapter.

### Subpart 63.20—Additional Control System Requirements

#### § 63.20-1 Specific control system requirements.

In addition to the requirements found in ASME CSD-1 (incorporated by reference; see 46 CFR 63.05-1), the following requirements apply for specific control systems:

(a) *Primary safety control system.* Following emergency safety trip control operation, the air flow to the boiler must not automatically increase. For this condition, postpurge must be accomplished manually.

(b) *Combustion control system.* A low fire interlock must ensure low fire start when variable firing rates are used.

(c) *Water level controls and low water cutoff controls.* Water level controls must be constructed and located to minimize the effects of vessel roll and pitch. Float chamber low water cutoff

controls using stuffing boxes to transmit the motion of the float from the chamber to the external switches are prohibited. No outlet connection other than pressure controls, water columns, drains, and steam gages may be installed on the float chamber or on the pipes connecting the float chamber to the boiler. The water inlet valve must not feed water into the boiler through the float chamber. The boiler feed piping must comply with the applicable requirements of § 56.50-30 of this chapter.

[CGD 88-057, 55 FR 24238, June 15, 1990, as amended by USCG-2003-16630, 73 FR 65191, Oct. 31, 2008]

### Subpart 63.25—Requirements for Specific Types of Automatic Auxiliary Boilers

#### § 63.25-1 Small automatic auxiliary boilers.

Small automatic auxiliary boilers defined as having heat-input ratings of 400,000 Btu/hr. or less (117 kilowatts or less) must also meet the following requirements.

(a) Small automatic auxiliary boilers must be equipped with a visual indicator which indicates when the low water cutoff has activated.

(b) A prepurge period of a sufficient duration to ensure at least four changes of air in the combustion chamber and stack, but not less than 15 seconds must be provided. Ignition must occur only before or simultaneously with the opening of the fuel oil valve.

[CGD 88-057, 55 FR 24238, June 15, 1990, as amended by USCG-2003-16630, 73 FR 65191, Oct. 31, 2008]

#### § 63.25-3 Electric hot water supply boilers.

(a) Electric hot water supply boilers that have a capacity not greater than 454 liters (120 U.S. gallons), a heat input rate not greater than 200,000 Btu/hr. (58.6 kilowatts), meet the requirements of UL 174 or UL 1453 (both incorporated by reference, see 46 CFR 63.05-1), and are protected by the relief device(s) required in 46 CFR 53.05-2 do not have to meet any other requirements of this section except the periodic testing required by paragraph (j) of this